

Low Impact Development Guidelines Avon, Connecticut

November 4, 2010



MILONE & MACBROOM®

The Cecil Group

Planning and Design

Agenda

Introduction

- Project Background
- Work Completed to Date
- Purpose of Meeting
- Introduction of Consultant Team

Barriers to Low Impact Development (LID) in Avon

Village Center Planning

- Existing Conditions/Context
- Significance of Ensign/Bickford Realty in Village Center
- Guiding Principles
- Building the Village Center Concept
- Implementation Strategies: Master Plans, Standards and Guidelines

Discussion

Next Steps

Adjourn



Avon Low Impact Development Guidelines

- Evaluate existing land use regulations and ordinances to identify “barriers” to LID
- Identify Critical Natural Resource Systems
- Develop Townwide Guidelines
- Village Center Design Guidelines
- Adoption of LID Regulations and Guidelines.



➤ Regulation and Ordinance Review

- Review the existing land use regulations and ordinances
- Identify impediments to Low Impact Development (LID) practices
- Identify section of the existing regulations where LID practices could be incorporated

➤ Critical Natural Resources

- GIS mapping of natural resources such as watershed boundaries, wetlands and watercourses, soil types, surficial geology, and other information
- Analyze and understand the environmental setting and Avon's place in the Farmington River Watershed



Subdivision Regulations

- Considerable Flexibility
- Some Impediments
- Some Regulatory Language Needed
- Generally Confined to Section 5



Subdivision Regulations

➤ Section 5.04 – Lot Grading and Drainage

- Encourage minimal lot grading
- Mimic natural runoff conditions
- Limitation on site disturbance and earthwork
- Soil restoration post-construction

➤ Section 5.05 – Streets; generally

- Reduce street length
- Minimize impervious pavement areas
- Protect site hydrology
- Reduce cut and fill



Subdivision Regulations

➤ Section 5.06 – Cul-de-sac or Dead-End

- Revised design standards for cul-de-sacs
- Specific design standards for depressed vegetated islands

➤ Section 5.07 – Design Standards

- Revised design standards for curbs
- Allow curb breaks for stormwater drainage
- Incorporation of specific road pavement design standards

➤ Section 5.09 – Drainage and Storm Sewers

- Encouragement of decentralized LID design strategies



Subdivision Regulations

➤ Section 5.10 – Drainage Design

- Encouragement of decentralized LID design strategies
- Revised design standards for drainage ditches
- Protection of natural resources through:
 - Cataloging and prioritizing on-site natural resources
 - Minimizing site disturbance
 - Avoiding soil compaction
 - Following natural contours and minimizing cut/fill
- References to State DEP Stormwater Quality Manual
- Stormwater volume control
- Operations and maintenance plans for stormwater drainage systems



Zoning Regulations

- Section IV.A.6 – Residential and Rural Zones: Height and Area Regulations
 - Buildable square standards
- Section VI.C – Commercial-Retail
 - Potential lot coverage bonus for utilizing LID techniques and BMPS
- Section VI.D – Commercial-Specialized
 - Potential lot coverage bonus for utilizing LID techniques and BMPS
- Section VII.A.4 – Parking Lot: Landscaped Area Requirements
 - LID standards for landscaped islands and parking lot drainage
- Section VII.B – Parking Regulations
 - Decrease Parking Requirements

Zoning Regulations

➤ Other Potential Regulations and Processes

- Payment-in-lieu of Parking program
- Incentives for Structured Parking
- Incremental Changes
 - Adopt specific LID regulations in only certain select zoning districts, evaluate their effectiveness over time, and apply to additional zoning districts if appropriate
- Village Center regulations

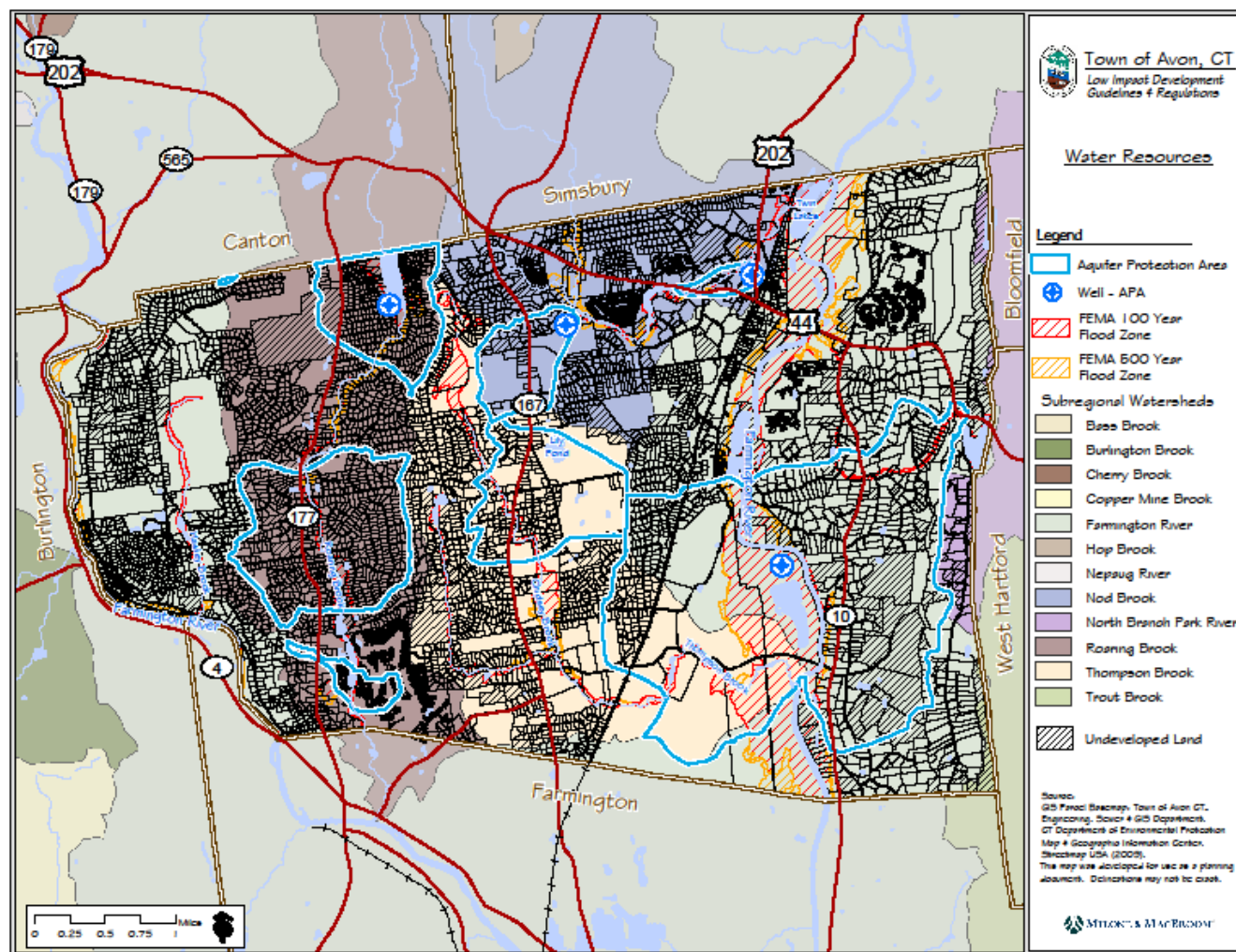


Inventory of Natural Resources

- Geographic Information Systems (GIS)
- Three Major Categories
 - Water Resources
 - Significant Habitats
 - Environmentally Sensitive Soils



Water Resources



Impervious Surface Analysis

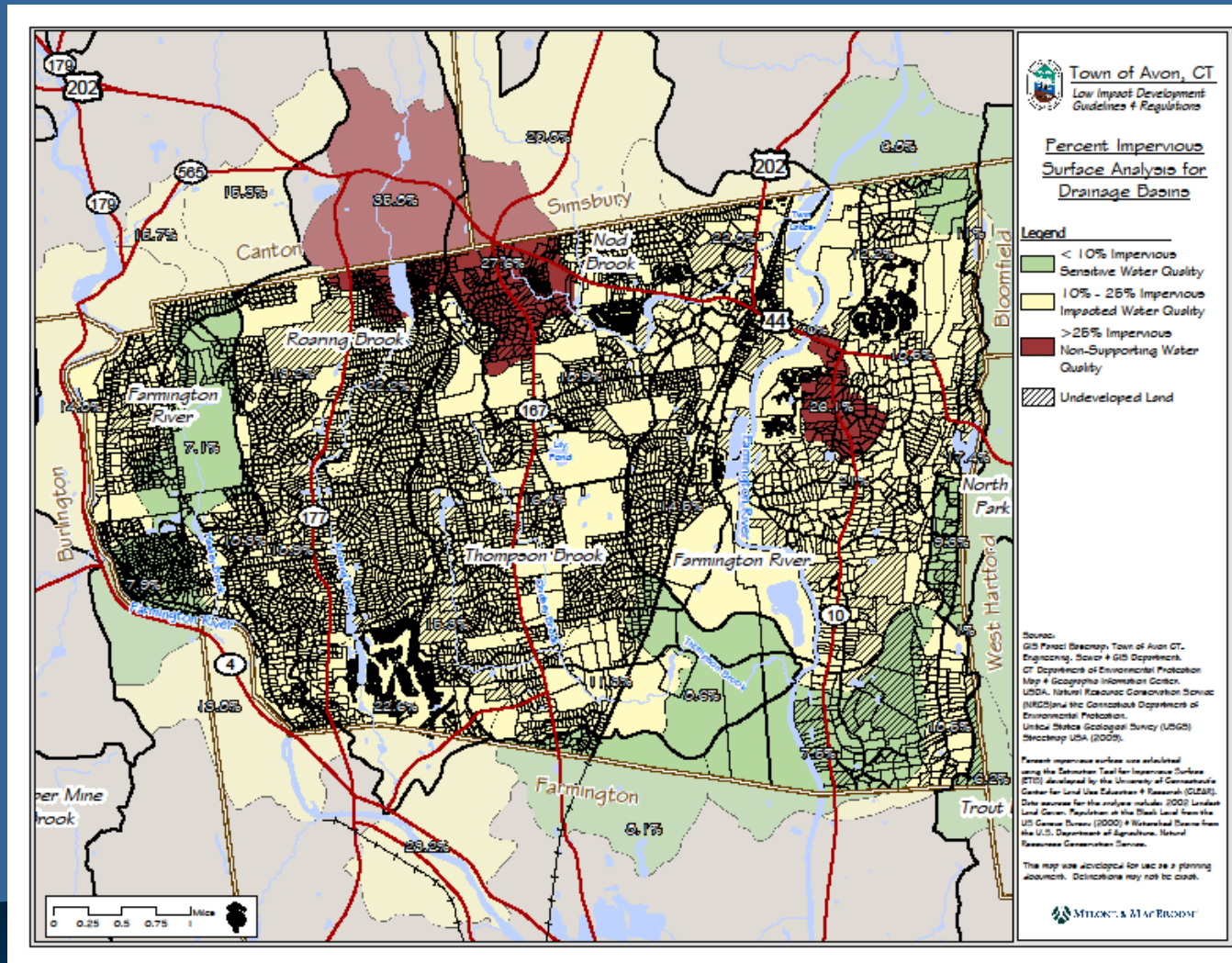
Impervious Surface Analysis for Avon, CT

Subregional Watershed	Total Area (ac)	Percentage of Watershed < 10% Impervious Surface	Percentage of Watershed 10%-25% Impervious Surface	Percentage of Watershed >25% Impervious Surface
Farmington River	7,220	25.7%	71.4%	2.9%
Roaring Brook	2,780	0.0%	94.5%	5.5%
Thompson Brook	3,009	17.9%	82.1%	0.0%
Nod Brook	1,730	0.0%	77.7%	22.3%
North Branch Park River	200	84.0%	16.0%	0.0%
Trout Brook	48	100.0%	0.0%	0.0%
Total:	14,987	17.4%	77.6%	5.0%

Note: Imperviousness was calculated using the Estimation Tool for Impervious Surface (ETIS) developed by the University of Connecticut's Center for Land Use Education & Research (CLEAR).



Impervious Surface Analysis

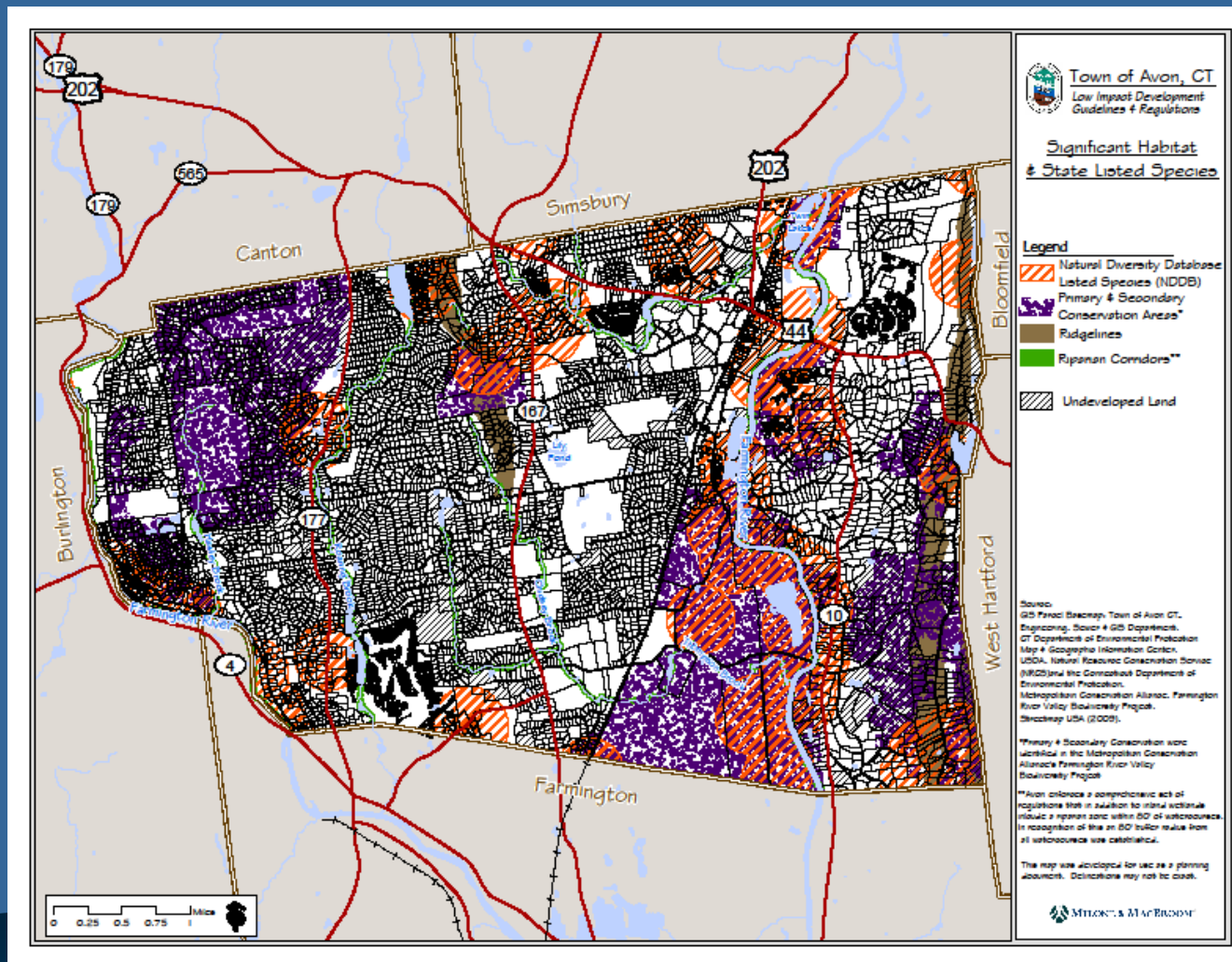


Surface Water Quality

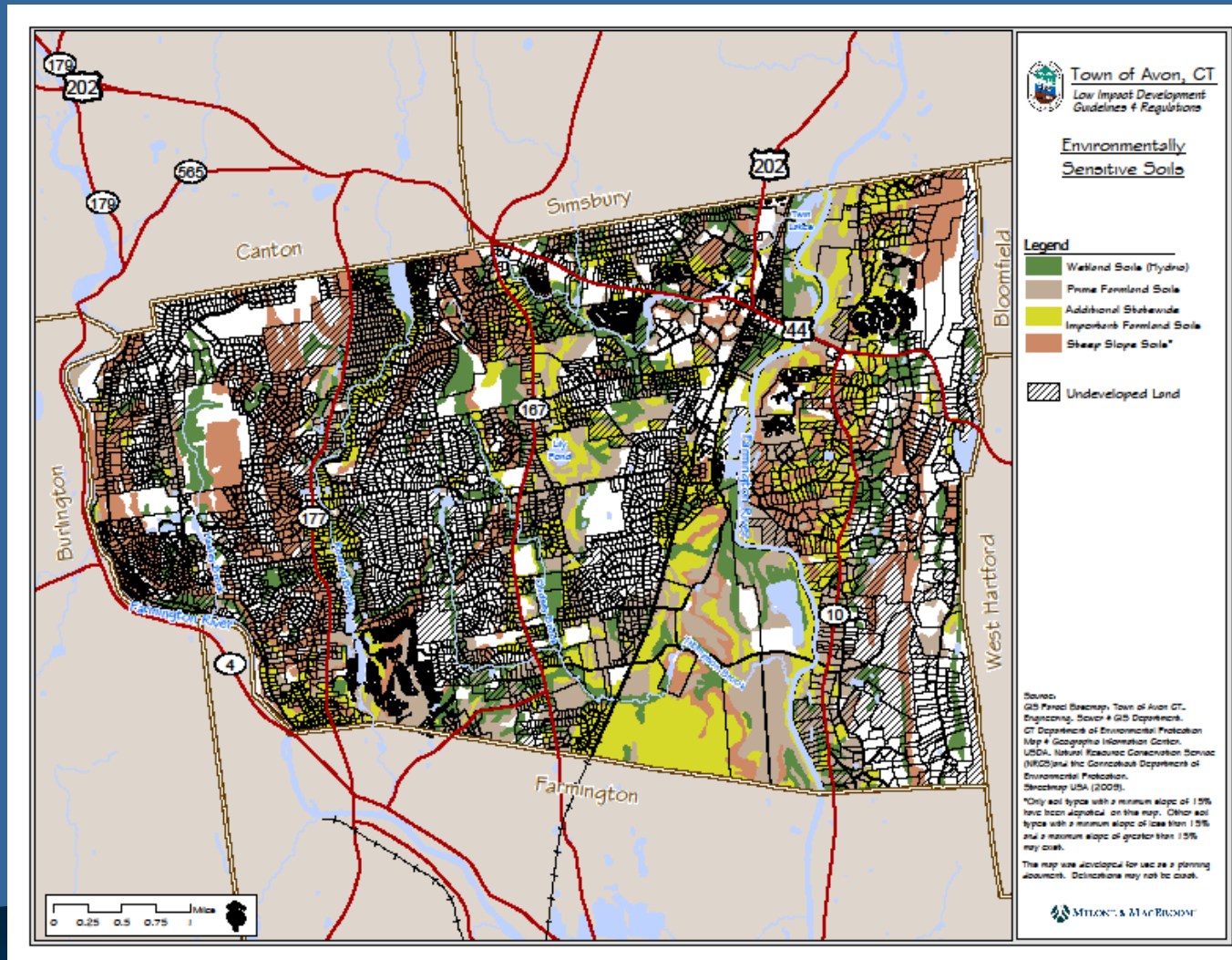
Surface Water Quality		
Watershed	Watercourse / Waterbody	Surface Water Classification / Attainment Goal
Farmington River	Farmington River	"B"
Farmington River	Hawley Brook	"A" & "B" / "A"
Farmington River	Twin Lakes - South	"A"
Farmington River	Ely Pond	"A"
Nod Brook	Twin Lakes - North	"B" / "A"
Nod Brook	Nod Brook	"B" / "A"
Nod Brook	Wiggin Brook	"B" / "A"
Nod Brook	Stub Pond	"B" / "A"
Thompson Brook	Thompson Brook	"A"
Thompson Brook	Chidsey Brook	"A"
Thompson Brook	Longo Pond	"A"
Thompson Brook	Lily Pond	"A"
Roaring Brook	Roaring Brook	"B" / "A"
Roaring Brook	Secret Lake	"B" / "A"



Significant Habitat & State Listed Species



Environmentally Sensitive Soils



Summary

- Regulations are Good
- Limited Impediments
- Some LID Regulatory Language Needed



Village Center Planning

- Existing Conditions and the Context of the Past
 - Avon Center is an historical composite rather than a prototypical “New England Town Center”
 - The components include a colonial-era crossroads, a manufacturing center, a commuter suburb, and planned development “parks”
 - The result is a complex of contributing places
 - The Town must decide what “Avon Center” will be, and cannot rely on prototypical models drawn from the past or other communities



Patterns of Development



Village Center Planning

- Some Towns grew around their Main Street and integral commons or open spaces – but this is neither the historic or practical option for Avon.
 - Main Street/Albany Turnpike/Route 44 is too wide and too busy to be the central focus for mixed-use, pedestrian scaled development or even for practical front doors for most uses.
 - However, it is a signature, historic environment that grants the Town part of its value and identity.



Main Street versus Main Arterial



Village Center Planning

- Master Planning and the Ensign/Bickford Opportunities
 - The amount of land is substantial, and it is not reasonable to fully or accurately predict the specific uses or timing of future investments.
 - Creating a coherent composition can be accomplished if there are underlying principles to guide increments of future development.



New Mixed Use District



A Center of Several Places



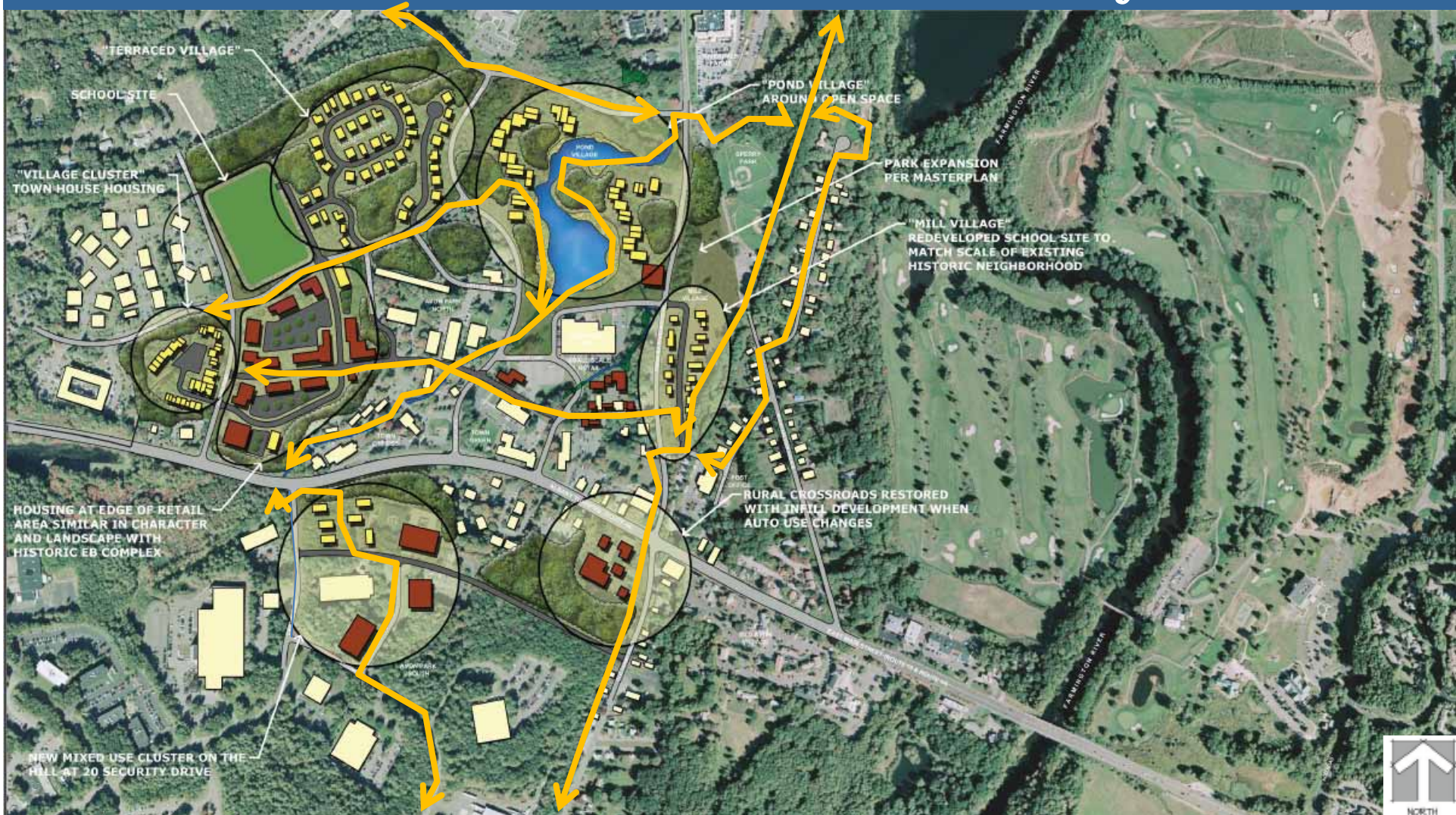
A Network of Streets...and New Main Street



A Network of Open Spaces



A Network of Paths and Bikeways



Zoning Regulations

➤ Other Potential Regulations and Processes

- Payment-in-lieu of Parking program
- Incentives for Structured Parking
- Incremental Changes
 - Adopt specific LID regulations in only certain select zoning districts, evaluate their effectiveness over time, and apply to additional zoning districts if appropriate
- Village Center regulations



Master Plan Regulations

- Principles for Master Planned Development
 - Clarity about land use mix, locations of districts or sub-areas, overall density and component density requirements
 - Clarity about phasing of development in terms of scale, proportions of open space, infrastructure and amenities
 - Clarity about “minor change” procedures to promote flexibility, and “major change” provisions for substantial change



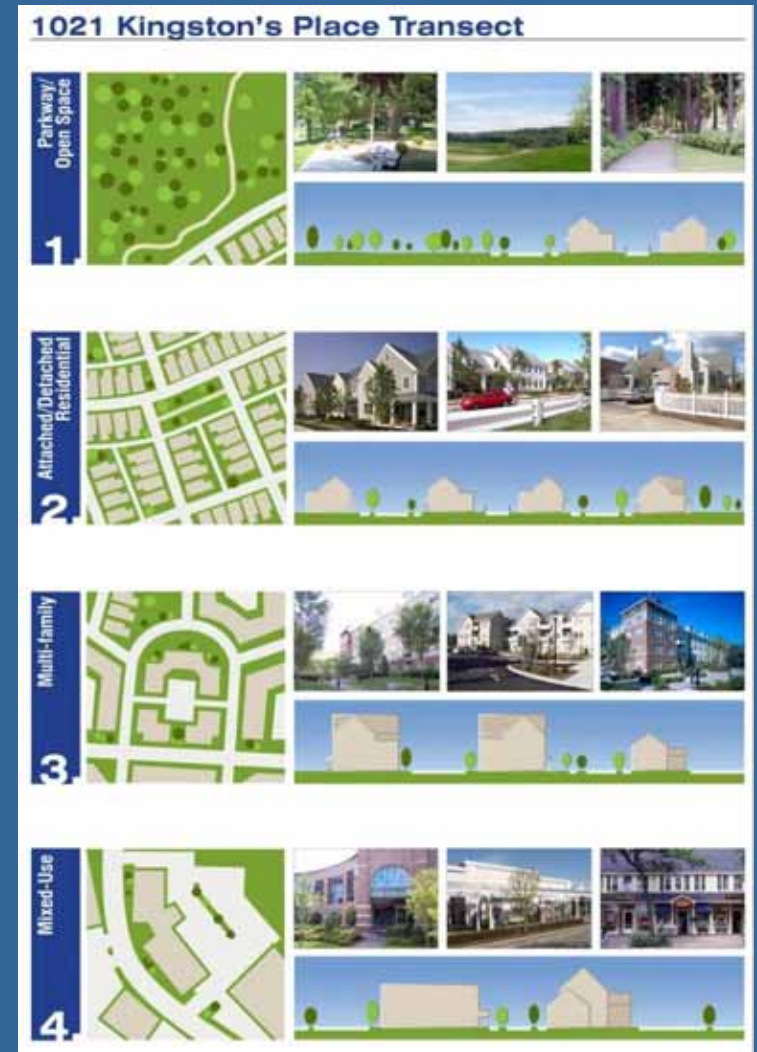
Master Plan Regulations

- Principles for Design Standards and Guidelines
 - Clarity about applicability: must not be used as a use, density or other basic entitlement tool
 - Standards: compliance can be objectively determined, but promote flexibility in the manner they are achieved
 - Guidelines: compliance is subject to mutual agreement but are not objectively measurable; the process becomes essential



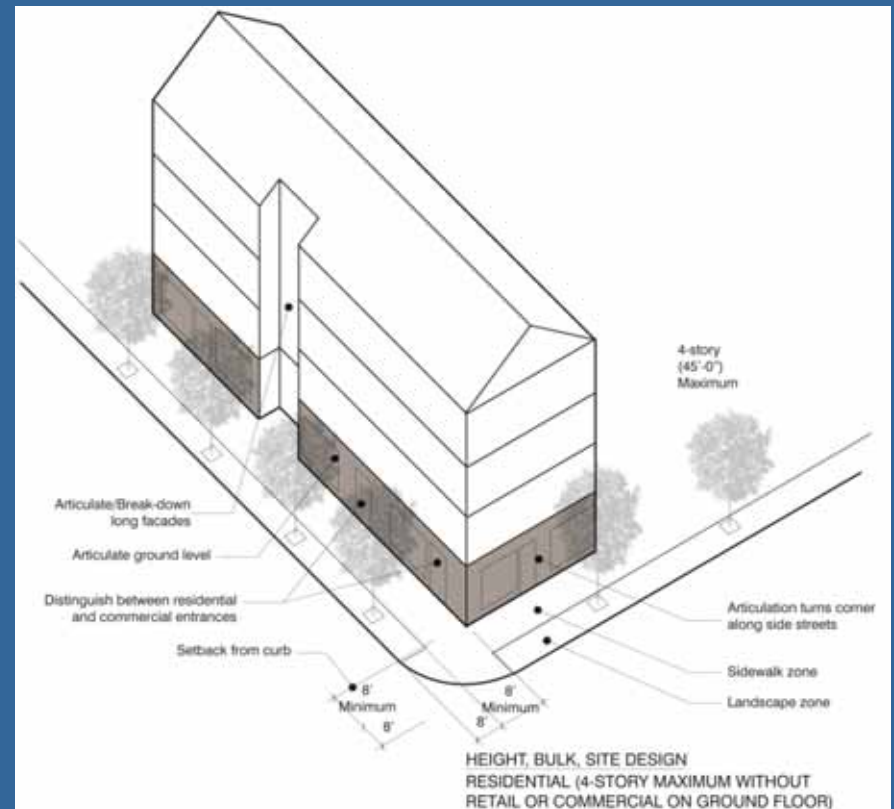
Design Standards and Guidelines

- Form-Based Standards
 - Provide predictability
 - Must be carefully assembled to promote appropriate flexibility for a long-term project



Design Standards and Guidelines

- Form-Based Standards
 - Promote effective mixed use building design if carefully prepared
 - Provide an method to establish appropriate scale



Design Standards and Guidelines

➤ Precedent Studies

- Process of reviewing desirable precedents sets the date for responsive design
- Provide an method to establish appropriate scale



Design Standards and Guidelines

- Ensuring the best outcome
 - Provisions should be included to permit projects to proceed with a design that both the proponent and the Town agree is better than would be provided by strict adherence to the Standards or Guidelines



Low Impact Development Guidelines Avon, Connecticut

November 4, 2010



MILONE & MACBROOM®

The Cecil Group

Planning and Design